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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/922,823	08/06/2001	Derek Priestley	9052-74	8860

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EXAMINER	
LEWIS, RALPH A	

ART UNIT	PAPER NUMBER
3732	

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

Office Action Summary	Application No.	Applicant(s)	
	09/922,823	PRIESTLEY ET AL.	
	Examiner	Art Unit	
	Ralph A. Lewis	3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 December 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17,20-28,30-32,34-37,39,40,43,44,46-51 and 53-56* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *12-17* is/are allowed.

6)☒ Claim(s) *1-11,20-28,30-32,34-37,39,40,44,46-51 and 53-56* is/are rejected.

7)☒ Claim(s) *43* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10/09/01* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Objection to the Claims

Claims 1, 28 and 44 are objected to under 37 CFR 1.75(a) for failing to particularly point out and distinctly claim the subject matter which applicant regards as his/her invention

In claim 1, line 3, and claim 28, line 4, it is suggested that applicant use language such as "to be placed" or "for placement" to make it clear that applicant is not intending to claim the "object" as part of the invention.

In claim 28, line 7, and claim 44, line 6, the "optionally" limitation is not understood. Either the claim requires the element or it does not. If the element is not required, then the superfoulous limitation should be deleted to avoid confusion.

In claims 46 and 47, it is unclear how limitations placed on the "object" which is not a part of the claimed device are intended to further limit the claimed device.

Rejections based on Prior Art

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7, 22, 23, 26-28, 30, 31, 34, 37, 39, 40, 44, 46, 47, 50, 51, 53, 55 and 56 are rejected under 35 U.S.C. 102(e) as being anticipated by Morris et al (US 6,328,567).

Morris et al discloses a system comprising a digital camera (column 6, lines 55-68) for taking colored images, means for relaying the images (column 8, lines 24-31), means for analyzing the color values of the images (column 8, line 65 - column 10, line 56) and means for converting the color values into parameters from which the original color may be reconstituted (column 10, lines 57 – 67).

In regard to the "a single grey reference colour indicator" limitation, Morris et al discloses the use of a single "A1" dental shade tab 109 (column 8, line 59) which is later described as "a light tan color" (column 11, lines 62-63). First in regard to the "single" limitation, it is noted that applicant uses the term "comprising" indicating that the system may include other elements other than those listed (e.g. black and white indicators). In regard to the "grey" limitation, applicant's specification provides little guidance on – i.e. why the color was chosen as opposed to a brown, tan or cream color or even if "grey" is distinct from the tans, cream and porcelain colors artificial teeth that contain a certain amount of gray color. With little guidance from applicant's specification, the tan color of Morris et al is deemed to meet the "grey" limitation because tan inherently includes gray coloring.

Claim 55 is rejected under 35 U.S.C. 102(b) as being anticipated by applicant's disclosure of admitted prior art at page 2 of the specification.

Applicant admits at page 2 of the specification that dental prosthesis are prior art. A prior art dental prosthesis does not become patentable merely because applicant intends for it to be manufactured in a different manner. There is no objectively ascertainable structural distinction between a dental prosthesis made in the prior art manner discussed and the method claimed by applicant.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-7, 20-24, 26-28, 30, 31, 34-37, 39, 40, 41, 44, 46- 51 and 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al (US 6,328,567).

In regard to the "grey" limitation, to the extent that the light tan color of Morris et al fails to meet the limitation, it is noted that applicant has provided no criticality in the selection of the grey color as opposed to a tan, cream or ivory for instance. Morris et al suggest that the third color may be any color somewhere between black and white (column 7, lines 45-56), to have selected gray, a color intermediate between black and

white, would have been obvious to one of ordinary skill in the art. Additionally, setting the camera at a given focal length, encrypting data sent via the internet and the use of the Morris et al system to accurately determine the color of objects other than teeth would have been obvious to one of ordinary skill in the art as a matter of routine design and practice.

Claims 4, 25 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al (US 6,328,567) in view of Shahid et al (US 5,967,775).

Shahid et al teach that when trying to determine the color of a patient's teeth that it is desirable to provide for a polarized filter in order to improve the image sensed. To have provided the Morris et al image sensor with a polarized filter in order to improve the image as taught by Shahid et al would have been obvious to one of ordinary skill in the art.

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al (US 6,328,567) in view of Lehmann et al (US 6,206,691).

Morris et al fail to set forth much detail regarding the camera used for acquiring the dental images, however, Lehmann et al for a similar dental color analyzer discloses a digital camera having a housing, point light sources 28 and having fiber optics (note Figure 13). To have used a camera having such features as those taught by Lehmann et al would have been obvious to one of ordinary skill in the art in light of the Lehmann teaching of such a camera being appropriate for such a use.

Allowable Subject Matter

Claims 12-17 are allowed.

Claim 43 is objected to as being dependent on a rejected base claim but would be allowable if rewritten in independent form.

Response to Applicant's Remarks

Applicant's remarks have been considered, but are deemed moot in view of the new grounds of rejection,

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication should be directed to **Ralph Lewis** at telephone number **(571) 272-4712.** Fax (703) 872-9306. The examiner works a compressed work schedule and is unavailable every other Friday. The examiner's supervisor, Kevin Shaver, can be reached at (571) 272-4720.

Ralph A. Lewis
Primary Examiner
AU 3732

R.Lewis
March 17, 2005